

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SHIEGEICHI ONO

Appeal No. 1997-0521
Application No. 08/105,839

ON BRIEF

Before HAIRSTON, RUGGIERO, and DIXON, **Administrative Patent Judges**.
DIXON, **Administrative Patent Judge**.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-15, which are all of the claims pending in this application.

We REVERSE.

BACKGROUND

The appellant's invention relates to a device and method for converting computer programming languages from one computer language into another computer

language. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below.

1. A device that converts a computer program written in an original computer language into a target program written in a target computer language, which is different from the original computer language, said device comprising:

a conversion rule input means which produces a conversion model created by inputting statements in said original language, and inputting the functional equivalent of said original language statements in said target language;

a conversion rule generation means for generating conversion rules from said conversion model;

an original program input means for inputting statements from said original program; and

a conversion rule drive means which locates conversion rules corresponding to said inputted original program statements and converts said original program into said target program according to the content of located conversion rules.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Bowles et al. (Bowles)	4,374,408	Feb. 15, 1983
Mohri	4,712,189	Dec. 08, 1987
Tolin	4,864,503	Sep. 05, 1989

Claims 1 and 7 stand rejected under 35 U.S.C. § 103 as being unpatentable over Tolin. Claims 2-6, 9 and 10 stand rejected under 35 U.S.C. § 103 as being unpatentable over Tolin in view of Mohri. Claim 8 stands rejected under 35 U.S.C. § 103 as being

unpatentable over Tolin in view of Bowles. Claims 11-15 stand rejected as being “based on [upon] the same rationale as set forth in claim 1 - 10.” (See answer at page 8.)

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejections, we make reference to the examiner's answer (Paper No.15, mailed Jan. 25, 1996), the supplemental examiner's answer (Paper No. 17, mailed Jun. 12, 1996) and the second supplemental examiner's answer (Paper No. 19, mailed Oct. 30, 1996) for the examiner's reasoning in support of the rejections, and to the appellant's brief (Paper No. 14, filed Aug. 14, 1995), the reply brief (Paper No. 16, filed Mar. 22, 1996), supplemental reply brief (Paper No. 18, filed July 8, 1996) and second supplemental reply brief (Paper No. 20, filed Dec. 6, 1996) for the appellant's arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by the appellant and the examiner. As a consequence of our review, we make the determinations which follow.

CLAIMS 1-10

Appellant argues that Tolin does not teach or suggest the use of the language translator for translation of functional statements in one computer language to functional statements in another computer language. (See brief at page 4-8.) We agree with appellant. Clearly,

Tolin does not teach the translation of functional computer programs to other computer languages, and the examiner has not provided a convincing line of reasoning why Tolin alone would have suggested to skilled artisans to apply the teaching regarding human language translation to translation of computer programs for use by machines.

Appellant argues Tolin does not teach or suggest inputting statements in said original language, and inputting the functional equivalent of said original language statements in said target language. (See answer at page 8.) We agree with appellant. While the examiner acknowledges this argument, the examiner does not address or respond to the lack of a teaching in Tolin with respect to the inputting of the functional equivalents. The examiner maintains that the intermediate language of Tolin is used to find the equivalent sentence in the target language and that the operator selects rules from memory. (See answer at page 4.) The examiner has not pointed to any disclosure in Tolin for his reasoning, and likewise, we find no support for the examiner's position.

Therefore, since Tolin alone does not teach or fairly suggest the claimed invention, we cannot sustain the rejection of claim 1 and its dependent claim 7.

With respect to claims 2-6, 9 and 10, the examiner adds Mohri to teach the use of keywords and word sections in a table driven system. Mohri like Tolin is a human language translator and does not teach or fairly suggest the use of a translator to translate computer programs from one machine language to another. Therefore, Mohri does not

remedy the deficiency in Tolin alone. Hence, we cannot sustain the rejection of claim 2 and its dependent claims 3-6, 9 and 10.

With respect to claim 8, the examiner adds Bowles with Tolin. Appellant argues that the deficiencies in Tolin alone are not remedied by Bowles. We agree with appellant. While Bowles is the closest prior art to translating computer programs from one computer language into another computer language, the examiner has not identified a conversion rule input means which produces a conversion model created by inputting statements in said original language, and inputting the functional equivalent of said original language statements in said target language. Bowles is silent as to how the model and rules are generated, and is concerned with the multipass functioning of the translator. Moreover, the examiner has not provided any cogent line of reasoning why or how a skilled artisan would have known how to input the model and rules. Nor has the examiner provided any suggestion or motivation to combine the teachings beyond the motivation to convert plural statements into singular statements. (See answer at page 8.) Therefore, we cannot sustain the rejection of claim 8 under the combination of Tolin and Bowles.

CLAIMS 11-15

Appellant argues that the examiner has not identified the basis of the rejection of claims 11-15 in the final rejection. (See brief at page 11.) We agree with appellant. The examiner is under a duty to set forth the grounds upon which the claims are denied

patentability as recited in 35 U.S.C. § 132 thereby providing appellant with notice and to allow appellant to take action as deemed appropriate.

Whenever, on examination, any claim for a patent is rejected, or any objection or requirement made, the Commissioner shall notify the applicant thereof, stating the reasons for such rejection, or objection or requirement, together with such information and references as may be useful in judging of the propriety of continuing the prosecution of his application; and if after receiving such notice, the applicant persists in his claim for a patent, with or without amendment, the application shall be reexamined. No amendment shall introduce new matter into the disclosure of the invention. (July 19, 1952, ch. 950, §1, 66 Stat: 801.)

In the answer, the examiner merely responds that the claims "merely repeated steps of the rejected claims 1 - 10 and therefore found it not necessary to specifically spell out the rejection." (See answer at page 12.) Whether the examiner finds it "necessary" or not, the Commissioner/Examiner is required to set forth both the statutory basis and the reference(s) upon which each claim is denied patentability. Here, there are three different combinations of references applied against claims 1-10, and we will not speculate as to which one the examiner bases his rejection. Therefore, we cannot sustain the examiner's asserted rejection of claims 11-15.¹

¹ We have reviewed the prior art to Tolin alone with respect to claims 11 and 12 and find that Tolin does not teach or suggest an automated method or apparatus of translating computer programs as discussed above with respect to claim 1. We note that claim 12 is the broadest claim. We further note that Bowles teaches a computer language translation system.

Appeal No. 1997-0521
Application No. 08/105,839

CONCLUSION

To summarize, the decision of the examiner to reject claims 1-15 under
35 U.S.C. § 103 is reversed.

REVERSED

KENNETH W. HAIRSTON
Administrative Patent Judge

JOSEPH F. RUGGIERO
Administrative Patent Judge

JOSEPH L. DIXON
Administrative Patent Judge

)
)
)
)
)
) BOARD OF PATENT
) APPEALS
) AND
) INTERFERENCES
)
)
)
)

vsh

Appeal No. 1997-0521
Application No. 08/105,839

ATTN: LAWRENCE D. CUTTER, ATTORNEY
IBM CORPORATION
INTELLECTUAL PROPERTY LAW
522 SOUTH ROAD, (MS-P903)
POUGHKEEPSIE , NY 12601-5400